

# emWEB-X Series

## Low-Cost, High Performance Web-Panel with HTML5 browser support



### PRODUCT DESCRIPTION

The emWEB-X panel devices are designed to simply visualize machine data provided in web pages, either in pages of CODESYS web visualization or in web pages of any web-based environment. emWEB-X panel devices are based on an Intel® Celeron® CPU with a dedicated GPU for rendering complex images and scenes. It can be supplied with 9V to 34V power and is connected via an Ethernet interface with the machine network. A second 4K monitor can be connected via mini Display Port. The HTML5 web browser operates in a tamper-proof environment.

### FEATURES

#### Processor

- Intel® Celeron® N3350 (2 x 1.1/2.4 GHz)
- High Burst-Frequency for Realtime image processing for smooth touch feeling
- Intel® HD-Graphics 500

#### Display

- 10.1", 15.6" or 21.5" TFT display <sup>1)</sup>
- LED backlight technology
- Aspect ratio 16:9
- Viewing Angle: Up to 178 ° <sup>1)</sup>
- Luminance: Up to 500 cd/m<sup>2</sup> <sup>1)</sup>
- Contrast Ratio: Up to 5000:1 <sup>1)</sup>
- MTBF of back light: 50,000 h

#### Touchscreen

- Capacitive touchscreen (PCT) with multi touch and glass surface <sup>1)</sup>
- Resistive touchscreen with single touch <sup>1)</sup>

#### Memory

- 4 GB DDR3 memory (8 GB on request)

#### Storage

- Internal M.2 slot

#### External Interfaces

- 1 x 10/100/1000 BaseT Ethernet
- 2 x USB 3.1 Gen 1
- 1 x Mini DP++ (up to 4096 x 2160 @ 60 Hz)

<sup>1)</sup> Feature depends on system type. Please see table SYTEM DEPENDENT FEATURES for further information

## Environment

- Ambient operating temperature: 0 °C ... 50 °C <sup>2)</sup>
- Non-operating temperature range: -20 °C ... 60 °C
- Humidity: 5 % ... 95 % @ 25 °C, non-condensing

## Power Supply

- 9/14 ... 34 V<sub>DC</sub>

## Software

- Debian Linux operating system
- Windows 10 IoT Enterprise
- Hardware Watchdog
- TPM 2.0

- HTML5 browser application automatically starting in full screen mode after system boot up

## Options

- Intel® Pentium® N4200 and Intel® Atom® E39xx on request (MoQ)
- Optical Bonding
- High Brilliance, sunreadable TFT Display
- CAN, RS232, RS485, RS422, digital I/O, Audio-Out, Mic-In or further interfaces on request (MoQ)
- Customized front design possible (MoQ)

## SYSTEM DEPENDENT FEATURES

System Type	emWEB-X/10	emWEB-X/15		emWEB-X/21
<b>Touch technology</b>	Capacitive Multitouch	Resistive	Capacitive Multitouch	Resistive
<b>Display size</b>	10.1" WXGA	15.6" WXGA		21.5"
<b>Display resolution</b>	1280 x 800	1366 x 768		1920 x 1080
<b>Contrast ratio</b>	800:1	500:1		5000:1
<b>Viewing angle</b>	170 ° (hor.) 170 ° (vert.)	170 ° (hor.) 160 ° (vert.)		178 ° (hor.) 178 ° (vert.)
<b>Luminance</b>	500 cd/m <sup>2</sup>	300 cd/m <sup>2</sup>		250 cd/m <sup>2</sup>
<b>Input Level</b>	9 ... 34 V <sub>DC</sub>	14 ... 34 V <sub>DC</sub>		14 ... 34 V <sub>DC</sub>
<b>Power consumption</b>	25 W (max.)	30 W (max.)		38 W (max.)
<b>Dimensions in mm (w x h x d)</b>	288 x 225 x 53.5	427 x 279 x 64.2		570.1 x 366.7 x 59.2
<b>Built-in depth in mm</b>	47	55.7		50.7

<sup>2</sup> When not exceeding 6 W CPU Power (incl. cores and graphics)